COLORADO DISCHARGE PERMIT SYSTEM (CDPS)
FACT SHEET FOR PERMIT NUMBER CO0020443
TOWN OF CRESTED BUTTE, TOWN OF CRESTED BUTTE WWTF
GUNNISON COUNTY

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I. TYPE OF PERMIT

A. Permit Type: Domestic - Minor Municipal, Mechanical Plant, Seventh Renewal

B. Discharge To: Surface Water

II. FACILITY INFORMATION

A. SIC Code: 4952 Sewerage Systems

B. Facility Classification: Class B per Section 100.5.2 of the Water and Wastewater Facility Operator Certification Requirements

C. Facility Location: Latitude: 38° 52' 29" N, Longitude: 106° 58' 33" W

D. Permitted Feature: 001A, following disinfection and prior to mixing with the receiving stream. 38° 87' 47.5" N, 106° 97' 57.8" W

The location provided above will serve as the point of compliance for this permit and it is appropriate as it is located after all treatment and prior to discharge to the receiving water.

E. Facility Flows: **0.6** MGD

F. Major Changes From Last Renewal:

- Monitoring for temperature
- Compliance schedule for installation of temperature monitoring equipment
- Compliance schedule for mixing zone study
- Monitoring for cadmium and zinc due to 303(d) listing

III. RECEIVING STREAM

A. Waterbody Identification: *COGUUG08*, *Slate River*

B. Water Quality Assessment:

An assessment of the stream standards, low flow data, and ambient stream data has been performed to determine the assimilative capacities for *Slate River* for potential pollutants of concern. This information, which is contained in the Water Quality Assessment (WQA) for this receiving stream(s), also includes an antidegradation review, where appropriate. The Division's Permits Section has reviewed the assimilative capacities to determine the appropriate water quality-based effluent limitations as well as potential limits based on the antidegradation evaluation, where applicable. The limitations based on the assessment and other evaluations conducted as part of this fact sheet can be found in Part I.A of the permit.

Permitted Feature *001A* will continue to be the authorized discharge point to the receiving stream.

IV. FACILITY DESCRIPTION

A. Infiltration/Inflow (I/I)

As with the previous permit, infiltration and inflow is still a concern during the runoff months. The facility has ongoing sewer system maintenance, repair and rehabilitation program and have made progress in mitigating I/I issues during runoff. The majority of the improvement has come from identifying homeowner's who have sump pumps connected to the sewer system and also making repairs that were contributing a lot of the flow. The daily maximum flow for the past 5 years of DMR review has been below the design capacity of 0.6 MGD except for the flow recorded on 06/01/2009 (0.68 MGD) and 05/31/2008 (0.77MGD). The excessive flow of 05/31/2008 resulted to a 30-day average violation for May 2008. No additional conditions are being included in this permit at this time for the control of I/I. The Division recommends continued improvement and progress towards addressing the I/I issues that occur during runoff.

B. Lift Stations

Table IV-1 summarizes the information provided in the renewal application for the lift stations in the service area.

Table IV-1 – Lift Station Summary

Station Name/#	Firm Pump Capacity (gpm)	Peak Flows (gpd)	% Capacity (based on peak flow)
#1 (8th Street)	200 gpm 2 @ 3 HP	8500	1.5
#2 (Ruth's Road)	35 gpm 2 @ 2 HP	1500	1.5
#3 (School)	130 gpm 2 @ 2.8 HP	3500	0.9
#4 (Verzuh)	50 gpm 2 @ 3HP	42000	29.2
#5 (Paradise Park)	50 gpm 2 @ 3 HP	2900	2.0

C. Chemical Usage

The permittee did not specify any chemicals for use in waters that may be discharged. On this basis, no chemicals are approved under this permit. Prior to use of any applicable chemical, the permittee must submit a request for approval that includes the most current Material Safety Data Sheet (MSDS) for that chemical. Until approved, use of any chemical in waters that may be discharged could result in a discharge of pollutants not authorized under the permit. Also see Part II.A.1. of the permit.

Chemicals deemed acceptable for use in waters that will or may be discharged to waters of the State are acceptable only when used in accordance with all state and federal regulations, and in strict accordance with the manufacturer's site-specific instructions.

D. Treatment Facility, Facility Modifications and Capacities

The facility has undergone improvements, however, the improvements did not alter the hydraulic or organic capacity. The upgrade consists of addition of a 40 ft diameter secondary clarifier with conventional scraper arm; addition of a mixed liquor splitter box with gates for directing oxidation ditch effluent to desired secondary clarifier. In addition to the upgrade, the existing facility consist of a 15-inch Palmer-Bowlus flume with ultrasonic recorder for influent monitoring; primary treatment (bar screen and grit removal); secondary treatment (oxidation ditch and secondary clarifier rated at 0.6 MGD); a UV disinfection system, and a 90° V-notch weir for effluent monitoring. The hydraulic capacity is 0.6 MGD and the organic capacity is 828 lbs BOD_5/day, which are specified in Site Approval 4257. That document should be referred to for any additional information.

Pursuant to Section 100.5.2 of the Water and Wastewater Facility Operator Certification Requirements, this facility will require a Class B certified operator.

E. Biosolids Treatment and Disposal

Biosolids are treated in an aerobic digester. The treated biosolids is hauled by Golden Eagle Trash Services for landfilling.

1. EPA General Permit

   EPA Region 8 issued a General Permit (effective October 19, 2007) for Colorado facilities whose operations generate, treat, and/or use/dispose of sewage sludge by means of land application,

landfill, and surface disposal under the National Pollutant Discharge Elimination System. All Colorado facilities are required to apply for and to obtain coverage under the EPA General Permit.

2. Biosolids Regulation (Regulation No. 64, Colorado Water Quality Control Commission)

   While the EPA is now the issuing agency for biosolids permits, Colorado facilities that land apply biosolids must comply with requirements of Regulation No. 64, such as the submission of annual reports as discussed later in this factsheet.

V. PERFORMANCE HISTORY

A. Monitoring Data

1. Discharge Monitoring Reports – The following tables summarize the effluent data reported on the Discharge Monitoring Reports (DMRs) for the previous permit term, for period of DMR review from January 2006 through July 2012.

Table V-1 – Summary of DMR Data for Permitted Feature 001A

Parameter	*# Samples or Reporting Periods*	*Reported Average Concentrations Avg/Min/Max*	*Reported Maximum Concentrations Avg/Min/Max*	*Previous Avg/Max/AD Permit Limit*	*Number of Limit Excursions*
Effluent Flow (MGD)	*79*	*0.2/0.09/0.68*	*0.24/0.1/0.77*	*0.6/Report*	*1*
*pH (su)**	*79*	*6.7/5.8/7.1*	*7/6.7/7.6*	*6.5 - 9*	*3*
E. coli (#/100 ml)	*79*	*3.1/1/186*	*11/1/2690*	*1372/2744*	
TRC (mg/l)	*0*	*NA/NA/NA*	*NA/NA/NA*	*Report/0.039*	
*NH3 as N, Tot (mg/l**)*	*79*	*3.3/0/20*	*5.7/0/28*	*Report/Report***	*1****
BOD5, effluent (mg/l)	*79*	*6.6/2.5/18*	*11/3/22*	*30/45/*	
BOD5 (% removal)	*79*	*97/88/99*	*NA/NA/NA*	*85 (min)*	
TSS, effluent (mg/l)	*79*	*6.6/0.8/27*	*13/1.4/47*	*30/45/*	*1*
TSS (% removal)	*79*	*97/87/100*	*NA/NA/NA*	*85 (min)*	
Oil and Grease (mg/l)	*71*	*NA/NA/NA*	*0/0/0*	*NA/10/*	
TDS (mg/l)					
PWS intake (mg/l)	*26*	*65/18/90*	*78/53/109*	*Report*	
WWTF effluent (mg/l)	*26*	*208/110/312*	*218/110/312*	*Report*	

**The pH data shows the minimum reported values in the "average" column, and the maximum reported values in the "maximum" column.*
***Permit Limit for ammonia is "Report" except for 30-day average for the months of June (27mg/l), July (18 mg/l), August (15 mg/l), September (12 mg/l) & October (13 mg/l).*
**** Ammonia violation of 08/31/2011. Permit limit is 15 mg/l, DMR report was 20 mg/l.*

2. Additional Data –The following table summarizes data collected by the State during a routine inspection in June 2009.

Table V-2 – Summary of Additional Data collected by the State during a routine inspection on 06/02/2009

Parameter	06/02/2009
Flow, MGD	*0.68*
BOD_5, mg/l	*2*
TSS, mg/l	*<10*
pH, s.u.	*6.7*
Ammonia, Total, mg/ as N	*1.8*

B. Compliance With Terms and Conditions of Previous Permit

1. Effluent Limitations – The data shown in the preceding table indicate a few violations of the permit. As mentioned above, the daily flow recorded on 05/31/2008 (0.68 MGD) resulted to a 30-day average violation for the month of May 2008. There were 3 violations of the minimum pH value, one ammonia 30-day average violation, and one violation of the 7-day average TSS.

   In accordance with 40 CFR Part 122.41(a), any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

VI. DISCUSSION OF EFFLUENT LIMITATIONS

A. Regulatory Basis for Limitations

1. Technology Based Limitations

   a. Federal Effluent Limitation Guidelines – The Federal Effluent Limitation Guidelines for domestic wastewater treatment facilities are the secondary treatment standards. These standards have been adopted into, and are applied out of, Regulation 62, the Regulations for Effluent Limitations.

   b. Regulation 62: Regulations for Effluent Limitations – These Regulations include effluent limitations that apply to all discharges of wastewater to State waters and are shown in Section VIII of the WQA. These regulations are applicable to the discharge from the Town of Crested Butte WWTF.

2. Numeric Water Quality Standards - The WQA contains the evaluation of pollutants limited by water quality standards. The mass balance equation shown in Section VI of the WQA was used for most pollutants to calculate the potential water quality based effluent limitations (WQBELs), M_2, that could be discharged without causing the water quality standard to be violated. For ammonia, the AMMTOX Model was used to determine the maximum assimilative capacity of the receiving stream. A detailed discussion of the calculations for the maximum allowable concentrations for the relevant parameters of concern is provided in Section V of the Water Quality Assessment developed for this permitting action.

   The maximum allowable effluent pollutant concentrations determined as part of these calculations represent the calculated effluent limits that would be protective of water quality. These are also known as the water quality-based effluent limits (WQBELs). Both acute and chronic WQBELs may

be calculated based on acute and chronic standards, and these may be applied as daily maximum (acute) or 30-day average (chronic) limits.

3. Narrative Water Quality Standards - Section 31.11(1)(a)(iv) of The Basic Standards and Methodologies for Surface Waters (Regulation No. 31) includes the narrative standard that State surface waters shall be free of substances that are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life.

   a. Whole Effluent Toxicity - The Water Quality Control Division has established the use of WET testing as a method for identifying and controlling toxic discharges from wastewater treatment facilities. WET testing is being utilized as a means to ensure that there are no discharges of pollutants "in amounts, concentrations or combinations which are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life" as required by Section 31.11 (1) of the Basic Standards and Methodologies for Surface Waters. The requirements for WET testing are being implemented in accordance with Division policy, Implementation of the Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (Sept 30, 2010). Note that this policy has recently been updated and the permittee should refer to this document for additional information regarding WET.

4. Water Quality Regulations, Policies, and Guidance Documents

   a. Antidegradation - Since the receiving water is Undesignated, an antidegradation review is required pursuant to Section 31.8 of The Basic Standards and Methodologies for Surface Water. As set forth in Section VII of the WQA, an antidegradation evaluation was conducted for pollutants when water quality impacts occurred and when the impacts were significant. Based on the antidegradation requirements and the reasonable potential analysis discussed above, antidegradation-based average concentrations (ADBACs) may be applied.

      According to Division procedures, the facility has three options related to antidegradation-based effluent limits: (1) the facility may accept ADBACs as permit limits (see Section VII of the WQA); (2) the facility may select permit limits based on their non-impact limit (NIL), which would result in the facility not being subject to an antidegradation review and thus the antidegradation-based average concentrations would not apply (the NILs are also contained in Section VII of the WQA); or (3) the facility may complete an alternatives analysis as set forth in Section 31.8(3)(d) of the regulations which would result in alternative antidegradation-based effluent limitations.

      The effluent must not cause or contribute to an exceedance of a water quality standard and therefore the WQBEL must be selected if it is lower than the NIL. Where the WQBEL is not the most restrictive, the discharger may choose between the NIL or the ADBAC: the NIL results in no increased water quality impact; the ADBAC results in an “insignificant” increase in water quality impact. The ADBAC limits are imposed as two-year average limits.

   b. Antibacksliding – As the receiving water is designated Reviewable and the Division has performed an antidegradation evaluation, in accordance with the Antidegradation Guidance, the antibacksliding requirements in Regulation 61.10 have been met.

   c. Determination of Total Maximum Daily Loads (TMDLs) – The receiving stream to which the Town of Crested Butte WWTF discharges is currently listed on the State’s 303(d) list for

development of TMDLs for cadmium and zinc. However, the TMDL has not yet been finalized. Consistent with Division practice, this permit establishes monitoring requirements for these pollutants until such time as the TMDLs is complete and waste load allocations have been determined. The permit may be reopened to include limitations based upon a finalized TMDL.

d. Colorado Mixing Zone Regulations – Pursuant to section 31.10 of The Basic Standards and Methodologies for Surface Water, a mixing zone determination is required for this permitting action. The Colorado Mixing Zone Implementation Guidance, dated April 2002, identifies the process for determining the meaningful limit on the area impacted by a discharge to surface water where standards may be exceeded (i.e., regulatory mixing zone). This guidance document provides for certain exclusions from further analysis under the regulation, based on site-specific conditions.

   The guidance document provides a mandatory, stepwise decision-making process for determining if the permit limits will not be affected by this regulation. Exclusion, based on Extreme Mixing Ratios, may be granted if the ratio of the facility design flow to the chronic low flow (30E3) is greater than 2:1 or if the ratio of the chronic low flow to the design flow is greater than 20:1. Since the ratio of the chronic low flow to the design flow is 10:1 the permittee must perform additional studies to determine if further requirements apply.

   The remaining threshold tests require site-specific information that is currently not available and thus a determination cannot be made about how the regulation may affect the setting of effluent limits in this permit. Therefore, a compliance schedule is necessary for acquisition of this information, which will be used to complete the testing of exclusion thresholds before the next permit renewal.

e. Salinity Regulations – In compliance with the Colorado River Salinity Standards and the Colorado Discharge Permit System Regulations, the permittee shall monitor for total dissolved solids on a **Quarterly** basis. Samples shall be taken at Permitted Feature 001A.

   An evaluation of the discharge of total dissolved solids indicates that the Town of Crested Butte facility does not exceed the threshold of 1 ton/day or 366 tons/year of salinity. To determine the TDS loading from this facility, the average reported TDS values were multiplied by the average flow, then by 8.34. The average was determined to be 0.18 tons/day.

f. Reasonable Potential Analysis – Using the assimilative capacities contained in the WQA, an analysis must be performed to determine whether to include the calculated assimilative capacities as WQBELs in the permit. This reasonable potential (RP) analysis is based on the Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential, dated December, 2002. This guidance document utilizes both quantitative and qualitative approaches to establish RP depending on the amount of available data.

   A qualitative determination of RP may be made where ancillary and/or additional treatment technologies are employed to reduce the concentrations of certain pollutants. Because it may be anticipated that the limits for a parameter could not be met without treatment, and the treatment is not coincidental to the movement of water through the facility, limits may be included to assure that treatment is maintained.

   A qualitative RP determination may also be made where a federal ELG exists for a parameter,

and where the results of a quantitative analysis results in no RP. As the federal ELG is typically less stringent than a limitation based on the WQBELs, if the discharge was to contain concentrations at the ELG (above the WQBEL), the discharge may cause or contribute to an exceedance of a water quality standard.

To conduct a quantitative RP analysis, a minimum of 10 effluent data points from the previous 5 years, should be used. The equations set out in the guidance for normal and lognormal distribution, where applicable, are used to calculate the maximum estimated pollutant concentration (MEPC). For data sets with non-detect values, and where at least 30% of the data set was greater than the detection level, MDLWIN software is used consistent with Division guidance to generate the mean and standard deviation, which are then used to establish the multipliers used to calculate the MEPC. If the MDLWIN program cannot be used the Division's guidance prescribes the use of best professional judgment.

For some parameters, recent effluent data or an appropriate number of data points may not be available, or collected data may be in the wrong form (dissolved vs total) and therefore may not be available for use in conducting an RP analysis. Thus, consistent with Division procedures, monitoring will be required to collect samples to support a RP analysis and subsequent decisions for a numeric limit. A compliance schedule may be added to the permit to require the request of an RP analysis once the appropriate data have been collected.

For other parameters, effluent data may be available to conduct a quantitative analysis, and therefore an RP analysis will be conducted to determine if there is RP for the effluent discharge to cause or contribute to exceedances of ambient water quality standards. The guidance specifies that if the MEPC exceeds the maximum allowable pollutant concentration (MAPC), limits must be established and where the MEPC is greater than half the MAPC (but less than the MAPC), monitoring must be established. Table VI-1 contains the calculated MEPC compared to the corresponding MAPC, and the results of the reasonable potential evaluation, for those parameters that met the data requirements. The RP determination is discussed for each parameter in the text below.

Table VI-1 – Reasonable Potential Analysis

Parameter	30-Day Average			7-Day Ave or Daily Max		
	MEPC	WQBEL (MAPC)	Reasonable Potential	MEPC	WQBEL (MAPC)	Reasonable Potential
Temp Daily Max (°C) June-Sept				NA	22	Monitor
Temp Daily Max (°C) Oct-May				NA	13	Monitor
Temp MWAT (°C) June-Sept	NA	17	Monitor			
Temp MWAT (°C) Oct-May	NA	9	Monitor			
E. coli (#/100 ml)	57	1305	Yes(Qual)	NA	2610	Yes(Qual)
TRC (mg/l)	NA	0.039	Yes(Qual)	NA	0.10	Yes(Qual)
NH3 as N, Tot (mg/l) Jan	20	29	Yes(Qual)	31	40	Yes(Qual)
NH3 as N, Tot (mg/l) Feb	20	27	Yes(Qual)	31	35	Yes(Qual)
NH3 as N, Tot (mg/l) Mar	20	28	Yes(Qual)	31	35	Yes(Qual)
NH3 as N, Tot (mg/l) Apr	20	32	Yes(Qual)	31	57	Yes(Qual)
NH3 as N, Tot (mg/l) May	20	91	Yes(Qual)	31	222	Yes(Qual)
NH3 as N, Tot (mg/l) Jun	20	54	Yes(Qual)	31	86	Yes(Qual)
NH3 as N, Tot (mg/l) Jul	20	39	Yes(Qual)	31	74	Yes(Qual)
NH3 as N, Tot (mg/l) Aug	20	16	Yes(Qual)	31	90	Yes(Qual)
NH3 as N, Tot (mg/l) Sep	20	12	Yes(Qual)	31	95	Yes(Qual)
NH3 as N, Tot (mg/l) Oct	20	13	Yes(Qual)	31	60	Yes(Qual)
NH3 as N, Tot (mg/l) Nov	20	26	Yes(Qual)	31	55	Yes(Qual)
NH3 as N, Tot (mg/l) Dec	20	29	Yes(Qual)	31	37	Yes(Qual)
Cd, Dis (µg/l)	NA	0.3	Monitor	NA	1.8	Monitor
Zn, Dis (µg/l)	NA	83	Monitor	NA	95	Monitor

B. Parameter Evaluation

BOD_5 - The BOD_5 concentrations in Reg 62 are the most stringent effluent limits and are therefore applied. The removal percentages for BOD_5 also apply based on the Regulations for Effluent Limitations. These limitations are the same as those contained in the previous permit and are imposed upon the effective date of this permit.

Total Suspended Solids - The TSS concentrations in Reg 62 are the most stringent effluent limits and are therefore applied. The removal percentages for TSS also apply based on the Regulations for Effluent Limitations. These limitations are the same as those contained in the previous permit and are imposed upon the effective date of this permit.

Oil and Grease – The oil and grease limitations from the Regulations for Effluent Limitations are applied as they are the most stringent limitations. This limitation is the same as those contained in the previous permit and is imposed upon the effective date of this permit.

pH - This parameter is limited by the water quality standards of 6.5-9.0 s.u., as this range is more stringent than other applicable standards. This limitation is the same as that contained in the previous permit and is imposed upon the effective date of this permit.

E. Coli – The limitations for *E. Coli* are based upon the WQBELs and the ADBACs as described in the WQA. A qualitative determination of RP has been made as the treatment facility has been designed to treat specifically for this parameter. Previous monitoring as shown in Table V-1 indicate that this limitation can be met and is therefore imposed upon the effective date of the permit.

Total Residual Chlorine (TRC) - The limitation for TRC is based upon the NIL as described in the WQA. A qualitative determination of RP has been made as chlorine may be used in the treatment process. This limitation is similar to the previous permit limit (0.039 as a daily max) and is therefore imposed upon the effective date of the permit.

Ammonia - The limitation for ammonia for the months of January, February, June and July are based upon the WQBEL and the rest of the months are based upon the NILs as described in the WQA. A qualitative determination of RP has been made as ammonia is a parameter of concern for municipal wastewater treatment facilities. Previous monitoring as shown in Table V-1 indicate that this limitation can be met and is therefore effective immediately.

Potentially Dissolved Cadmium and Potentially Dissolved Zinc: As mentioned in Section VI.A.4.c, monitoring will be included for Cd and Zn until future allocations from a TMDL provides specific wasteload for this facility.

Temperature - The MWAT is the maximum weekly average temperature, as determined by a seven day rolling average, using at least 3 equally spaced temperature readings in a 24-hour day (at least every 8 hours for a total of at least 21 data points).

The daily maximum is defined as the maximum 2 hour average, with a minimum of 12 equally spaced measurements throughout the day. As both of these temperature requirements will likely require the use of automated temperature measurements and recordings, the permittee is given until June 30, 2013, to have the proper equipment in place to take the required readings.

As it is unknown whether the facility can meet the new temperature limitation, or whether there is reasonable potential for the facility to cause or contribute to an exceedance of the water quality standard for temperature, report only conditions will be required for the duration of this permit. Upon the next permit renewal, the collected temperature data will be used to determine if there is reasonable potential, and/or if the permittee can meet the limitation.

As continuous ambient water quality data, in accordance with the definition of the standard, is not available, the permittee is encouraged to collect instream data on a continuous basis. This data may be used during the next permit renewal, so that the assimilative capacity of the receiving water (if applicable) can be calculated and used to determine a limitation based on the streams dilution potential. If such data is not available, the Division will likely set the limitation at the water quality standard (i.e. end of pipe limit, no dilution).

Organics – The effluent is not expected or known to contain organic chemicals; therefore, limitations for organic chemicals are not needed in this permit.

Whole Effluent Toxicity (WET) Testing – This facility does not receive a significant volume of toxic or industrial wastes, and parameters of concern are adequately controlled by specific effluent limitations.

Due to the above statements, and in accordance with Section 61.8(2)(b)(i)(B) of the Colorado Discharge

Permit System Regulations, the discharge does not have the reasonable potential to cause, or measurably contribute to, an excursion above any narrative standards for water quality. Therefore, WET testing is not a requirement of this permit. However, the Division reserves the right to reopen the permit to include WET testing, should facility conditions change or if new information becomes available.

C. Parameter Speciation

Dissolved Metals / Potentially Dissolved
For metals with aquatic life-based dissolved standards, effluent limits and monitoring requirements are typically based upon the potentially dissolved method of analysis, as required under Regulation 31, Basic Standards and Methodologies for Surface Water. Thus, effluent limits and/or monitoring requirements for these metals will be prescribed as the "potentially dissolved" form.

VII. ADDITIONAL TERMS AND CONDITIONS

A. Monitoring

Effluent Monitoring – Effluent monitoring will be required as shown in the permit document. Refer to the permit for locations of monitoring points. Monitoring requirements have been established in accordance with the frequencies and sample types set forth in the Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Industrial and Domestic Wastewater Treatment Facilities. This policy includes the methods for reduced monitoring frequencies based upon facility compliance as well as for considerations given in exchange for instream monitoring programs initiated by the permittee. Table VI-2 shows the results of the reduced monitoring frequency analysis for Permitted Feature 001A, based upon compliance with the previous permit.

Based upon the reduced monitoring frequency analysis for Permitted Feature 001A, shown in Table VI-2, the permittee is not eligible for reduced monitoring for pH.

Table VI-2 – Monitoring Reduction Evaluation

Parameter	*Proposed Permit Limit*	*Average of 30-Day (or Daily Max) Average Conc.*	*Standard Deviation*	*Long Term Characterization (LTC)*	*Reduction Potential*
pH (su) Minimum	*min 6.5*	*6.6*	*0.26*	*6.08*	*None*
pH (su) Maximum	*max 9.0*	*7.1*	*0.26*	*7.62*	
E. coli (#/100 ml)	*1305*	*2.3*	*6.5*	*15.3*	*3 Levels*
TRC (mg/l)	*0.039*	*NA*	*NA*	*NA*	*NA*
NH3 as N, Tot (mg/l)	*12*	*3.5*	*4.2*	*11.9*	*1 Levels*
BOD5, effluent (mg/l)	*30*	*7.3*	*3.6*	*14.5*	*3 Levels*
TSS, effluent (mg/l)	*30*	*8.6*	*3.9*	*16.4*	*2 Levels*
Oil and Grease (mg/l)	*10*	*0*	*0*	*0*	*3 Levels*

B. Reporting

1. Discharge Monitoring Report – The Town of Crested Butte facility must submit Discharge Monitoring Reports (DMRs) on a monthly basis to the Division. These reports should contain the required summarization of the test results for all parameters and monitoring frequencies shown in Part I.A of the permit. See the permit, Part I.B, C and D for details on such submission.

2. Special Reports – Special reports are required in the event of an upset, bypass, or other noncompliance. Please refer to Part II.A. of the permit for reporting requirements. As above, submittal of these reports to the US Environmental Protection Agency Region VIII is no longer required.

C. **Signatory and Certification Requirements**

Signatory and certification requirements for reports and submittals are discussed in Part I.D.6. of the permit.

D. Compliance Schedules

The following compliance schedules are included in the permit. See Part I.B of the permit for more information.

a. Temperature - Time is needed for the Permittee to install temperature monitoring equipment. The Permittee has been given until June 30, 2013 to install temperature monitoring equipment.
b. Mixing Zone Study - Time will be allowed for the permittee to collect the necessary site-specific data and perform threshold tests.

All information and written reports required by the following compliance schedules should be directed to the Permits Section for final review unless otherwise stated.

E. Economic Reasonableness Evaluation

Section 25-8-503(8) of the revised (June 1985) Colorado Water Quality Control Act required the Division to "determine whether or not any or all of the water quality standard based effluent limitations are reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons, and are in furtherance of the policies set forth in sections 25-8-192 and 25-8-104."

The Colorado Discharge Permit System Regulations, Regulation No. 61, further define this requirement under 61.11 and state: "Where economic, environmental, public health and energy impacts to the public and affected persons have been considered in the classifications and standards setting process, permits written to meet the standards may be presumed to have taken into consideration economic factors unless:

a. A new permit is issued where the discharge was not in existence at the time of the classification and standards rulemaking, or

b. In the case of a continuing discharge, additional information or factors have emerged that were not anticipated or considered at the time of the classification and standards rulemaking."

The evaluation for this permit shows that the Water Quality Control Commission, during their proceedings to adopt the Classifications and Numeric Standards for Gunnison and Lower Dolores River Basins, considered economic reasonableness.

Furthermore, this is not a new discharger and no new information has been presented regarding the classifications and standards. Therefore, the water quality standard-based effluent limitations of this

permit are determined to be reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons and are in furtherance of the policies set forth in Sections 25-8-102 and 104. If the permittee disagrees with this finding, pursuant to 61.11(b)(ii) of the Colorado Discharge Permit System Regulations, the permittee should submit all pertinent information to the Division during the public notice period.

VIII. REFERENCES

A. Colorado Department of Public Health and Environment, Water Quality Control Division Files, for Permit Number CO0020443.

B. "Design Criteria Considered in the Review of Wastewater Treatment Facilities", Policy 96-1, Colorado Department of Public Health and Environment, Water Quality Control Commission, April 2007.

C. Basic Standards and Methodologies for Surface Water, Regulation No. 31, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective January 31, 2013.

D. Classifications and Numeric Standards for Gunnison and Lower Dolores River Basins, Regulation No. 35, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective March 30, 2013.

E. Colorado Discharge Permit System Regulations, Regulation No. 61, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective January 1, 2012.

F. Regulations for Effluent Limitations, Regulation No. 62, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective July 30, 2012.

G. Pretreatment Regulations, Regulation No. 63, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective April 01, 2007.

H. Biosolids Regulation, Regulation No. 64, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective March 30, 2010.

I. Colorado's Section 303(d) List of Impaired Waters and Monitoring and Evaluation List, Regulation No 93, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective April 30, 2010.

J. Antidegradation Significance Determination for New or Increased Water Quality Impacts, Procedural Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective December 2001.

K. Memorandum Re: First Update to (Antidegradation) Guidance Version 1.0, Colorado Department of Public Health and Environment, Water Quality Control Division, effective April 23, 2002.

L. Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential, Colorado Department of Public Health and Environment, Water Quality Control Division, effective December2002.

M. The Colorado Mixing Zone Implementation Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective April 2002.

N. Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Domestic and Industrial Wastewater Treatment Facilities, Water Quality Control Division Policy WQP-20, May 1, 2007.

O. Implementing Narrative Standards in Discharge Permits for the Protection of Irrigated Crops, Water Quality Control Division Policy WQP-24, March 10, 2008.

P. Implementing Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (WET) Testing. Colorado Department of Public Health and Environment, Water Quality Control Division Policy Permits-1, September 30, 2010.

Q. Policy for Conducting Assessments for Implementation of Temperature Standards in Discharge Permits, Colorado Department of Public Health and Environment, Water Quality Control Division, Policy Number WQP-23, effective July 3, 2008.

R. Policy for Permit Compliance Schedules, Colorado Department Public Health and Environment, Water Quality Control Division Policy Number WQP-30, effective December 2, 2010.

S. Procedural Regulations for Site Applications for Domestic Wastewater Treatment Works, Regulation No. 22, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2009.

T. Regulation Controlling discharges to Storm Sewers, Regulation No. 65, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective May 30, 2008.

U. Water and Wastewater Facility Operator Certification Requirements, Regulation No. 100, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2007.

Abigail Ogbe
12/20/12

IX. PUBLIC NOTICE COMMENTS

The public notice period was from November 16, 2012 to December 17, 2012. Comments were received from the Town of Crested Butte. Topical summaries of the comments and the response of the Division are given below. Copies of the comments are located in Division files and will be made available upon request.

Comment 1:
Part I.A.3: The monitoring requirements for effluent BOD and TSS are quarterly, and the effluent limitation maximum concentration is based on a 30-day average. I spoke with the permit writer about how this is reported, and if I understood correctly, the effluent BOD and TSS will actually be reported on the DMR as a quarterly average. Can you confirm this and do we need to have that specified in the permit?

Response 1:
The monitoring requirements for effluent BOD is quarterly and TSS is monthly. If more than one sample is collected during the quarterly reporting period for BOD, the highest of the 30-day averages (based on a calendar month) within that calendar quarter shall be reported in the space available for 30-day average. If only one sample is taken, then that sample result would be reported. For TSS, samples are required monthly, therefore reporting should be done accordingly. See also permit Part 1.C.16 for the definition of 30-day average.

Comment 2:
Permit Part I.B.3 - Expansion Requirements: Part I.A.3 of our current permit provides a deadline of March 31st of the following year for submitting a report providing a planning schedule for expansion or an analysis regarding the circumstance of exceedances of 80% or 95% of the hydraulic or organic loading. There is no deadline specified in this section. Does this need to be specified?

Part I.A.3 of our current permit also states that "lf 80% or 95% of the hydraulic capacity identified in Part. I.A.2 of this permit was exceeded during the month of maximum flow, then the permittee is not required to provide the information required in paragraphs a) through c), above. unless violation(s) of effluent limits can be directly related to the magnitude of the hydraulic loading during any such months." I would like to request that this paragraph be included in the new permit. We have put a large amount of time into mitigating inflow and infiltration into the collection system and have seen lower peak flows during the spring runoff period. However, groundwater conditions are highly variable from year to year and it seems appropriate that excluding the month of highest flow is appropriate.

Response 2:
The Expansion Requirements now included in Part 1.B.3 of the new permit is in accordance with Regulation 61.8(7), amended on 12/12/2011 and effective on 01/30/2012. Note that although there are no dated deadlines for actions, actions are triggered whenever throughput reaches or exceeds 80% or 95% of the treatment capacity.

Comment 3:
Part I.D.7: I would like to request that the permit allow the flow measured at the effluent V-notch weir to be used for the hydraulic loading as well as the organic loading calculations. The facility does not have an equalization basin or any means of bypass so this flow measurement represents the influent flow accurately. The influent measuring device is a 15" Palmer-Bowlus flume which is not as accurate as the V- notch weir at the low flows that we see during many times of the year especially during the overnight hours and I believe this inflates the organic loading values. I would be happy to discuss this in more detail if you are considering this option.

Response 3:
Permit Part I.A.2 - Flow Recording Device have been modified to read “For this facility, two flow recording devices are provided and are located at the point of inflow to and discharge from the treatment plant. In case of malfunction, a single flow measurement device will be used for recording and reporting of both influent and effluent flows since effluent flows will not be significantly different from influent flows. Reported flows will be used to monitor compliance with the effluent flow limitation.” This should allow the use of the effluent flow meter, when the influent flow meter is not working correctly and vice versa.

Comment 4:
Part IV.E of the Fact Sheet reports that we contract with Parker Ag Services to haul and dispose of the biosolids generated at the plant. We have changed this arrangement and now landfill all biosolids at the Gunnison

County Landfill. The hauling is contracted through Golden Eagle Trash Service. The biosolids permit issued in 2007 was amended to allow for landfilling.

Response 4:
Part IV.E of the Fact Sheet has been updated with the new information.

Abigail Ogbe
12/20/12